

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows.

1. (Original) A development method in which, while stirring a developer which is a mixture of a magnetic carrier and a toner and supplying the toner of the developer, a toner density TD (%) of the developer is measured, and the toner is supplied to the developer, depending on a reduction in the measured toner density TD (%), wherein

the toner is supplied to the developer so that the measured toner density TD (%) falls within a range specified by:

$$TD \leq \{\gamma_t \cdot V_t / N_t / (\gamma_c \cdot V_c)\} \times 100 \quad (1)$$

$$V_t = (1/6) \cdot (D_{av_pop})^3$$

$$S_c = (1/6) \cdot (D_{av_pop} + D_{av_pop})^2$$

$$N_t = S_c / [(3^{0.5}/2) \cdot (D_{av_pop})^2] / 2$$

$$V_c = (1/6) \cdot (D_{av_pop})^3$$

where a number average diameter of the magnetic carrier is represented by D_{av_pop} (μm), a number average diameter of the toner is represented by D_{av_pop} (μm), a specific gravity of the magnetic carrier is represented by γ_c , and a specific gravity of the toner is represented by γ_t .

2. (Original) A development method in which, while stirring a developer which is a mixture of a magnetic carrier and a toner and supplying the toner of the developer, a toner density TD (%) of the developer is measured, and the toner is

supplied to the developer, depending on a reduction in the measured toner density TD (%), wherein

the toner is supplied to the developer so that the measured toner density TD (%) falls within a range specified by:

$$TD \leq \{\gamma_t \cdot V_t / N_t / (\gamma_c \cdot V_c)\} \times 100 \quad (2)$$

$$V_t = (1/6) \cdot (D_{av_vol})^3$$

$$S_c = \pi \cdot (D_{av_vol} + D_{cav_vol})^2$$

$$N_t = S_c / [(3^{0.5}/2) \cdot (D_{av_vol})^2] / 2$$

$$V_c = (1/6) \cdot (D_{cav_vol})^3$$

where a volume average diameter of the magnetic carrier is represented by D_{cav_vol} (μm), a volume average diameter of the toner is represented by D_{av_vol} (μm), a specific gravity of the magnetic carrier is represented by γ_c , and a specific gravity of the toner is represented by γ_t .

3. (Original) A development method in which, while stirring a developer which is a mixture of a magnetic carrier and a toner and supplying the toner of the developer, a toner density TD (%) of the developer is measured, and the toner is supplied to the developer, depending on a reduction in the measured toner density TD (%), wherein

the toner is supplied to the developer so that the measured toner density TD (%) falls within a range specified by:

$$TD \leq [5.1(D_{av_vol})^{-1.17}] \times 100 \quad (3)$$

where a volume average diameter of the magnetic carrier is represented by D_{cav_vol} (μm), and a volume average diameter of the toner is 5.5 (μm).

4. (Currently Amended) A development method in which, while stirring a developer which is a mixture of a magnetic carrier and a toner and supplying the toner of the developer, a toner density TD (%) of the developer is measured, and the toner is supplied to the developer, depending on a reduction in the measured toner density TD (%), wherein

the toner is supplied to the developer so that the measured toner density TD (%) falls within a range specified by:

$$TD/(D_{cav_vol})^{1.2} \leq [5.1(D_{cav_vol})^{-1.17}/5.5^{1.2}] \times 100 \quad (4)$$

where a volume average diameter of the magnetic carrier is represented by D_{cav_vol} (μm), and a volume average diameter of the toner is represented by D_{tav_vol} (μm), ~~said and with a proviso that the volume average diameter of the toner~~ D_{tav_vol} (μm) being [[is]] in the vicinity of 5.5 (μm).

5. (Previously Presented) The development method according claim 1, wherein the toner is a toner produced by a pulverizing method.

6. (Previously Presented) The development method according to claim 1, wherein the toner has a diameter distribution with a standard deviation σ of 15 (%) or more.

ONDA ET AL.
Appl. No. 10/577,491
Atty. Ref.: 4255-32
February 15, 2008
Amendment

7. (Previously Presented) The development method according to claim 1,
wherein the toner has a pigment concentration of 5 (%) or more.

Claims 8-9. (Canceled)